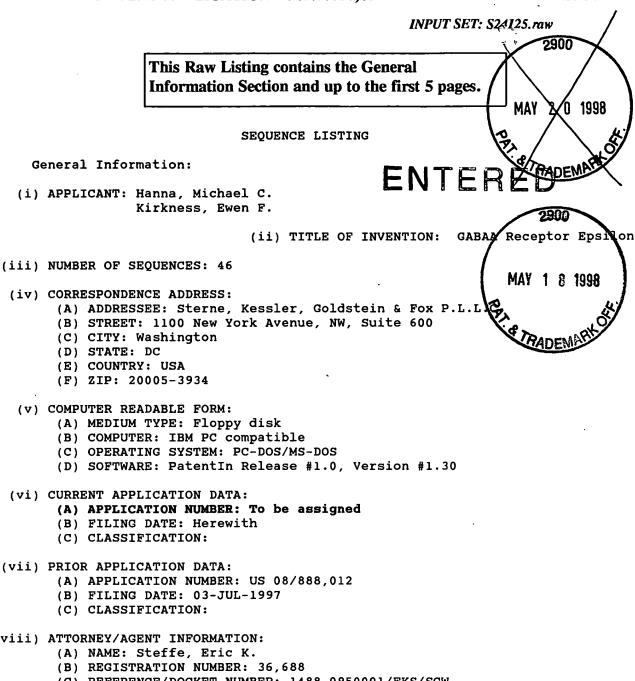
(1)

RAW SEQUENCE LISTING PATENT APPLICATION US/09/030.832 DATE: 03/12/98

TIME: 17:33:54



 (viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Steffe, Eric K.

(C) REFERENCE/DOCKET NUMBER: 1488.0950001/EKS/SGW

(ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: (202) 371-2600

(B) TELEFAX: (202) 371-2540

(2) INFORMATION FOR SEQ ID NO:1:

47

RAW SEQUENCE LISTING PATENT APPLICATION US/09/030,832

DATE: 03/12/98 TIME: 17:33:56

INPUT SET: S24125.raw

47 48 49 50 51 52 53 54 55 56 57 58 59 60	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 6146 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: double (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: CDS (B) LOCATION: 38724597 													
61 62	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:													
63 64	GTCTTATAAT	TGCTAAGCAC	TTACAACTGT	TTGCAGAGGA	AACTGAGACT	TTGTAACTAT	60							
65 66	GTCTCAGTCT	CATCTGCAAA	GAAGTAAGTG	CTTTGCCAAG	CTCCTTGAGA	GGTTAGGTAA	120							
67 68 69	GTAGATAAAG	TTCTGCTGCT	GTCGGAATGT	GCAGCTGGCT	TTTTCATGCA	GACCCTTCAG	180							
70 71	TTTCGAGGTT	ACAACTCTGA	CCTCTTTGGA	TGACTTTGGG	GAATGGAGCT	CGTGTGAGTT	240							
72	CTCCATACCC	AGAACCAATC	CAGTCTGGTT	GAATGGGAAG	CAAAGTCCAT	TGTAGTGGGA	300							
73 74	GGTGGAGGCT	AGAGTTCTAA	TGTCAGCTAG	TTTAAGGCTG	GGAAAGTCTG	GAGGAAGTTA	360							
75 76 77	CAGCAGCTAC	ACTGGCTGCT	GCATTGACAT	ТТАТСТТААА	GGAACAAGTC	TGAAAAGCAC	420							
78 79	AGATTCTTAT	CAAAGGCTTC	ATGGTGGATT	CCACATAGAC	ATAGTGGCCA	CTGGTTTTCT	480							
80 81	GACCTTTTCT	CTGACAAAGA	CTAAAGGGGA	AGGTCCTGGG	TATCTTACAC	TTCAGCTCCC	540							
82 83	AATTAGATGT	GAGCACCTTC	ACTTATGTTC	CTAGGTGACC	TGAATGAGGA	GCCAAGGGAC	600							
84	CTCCCCAGGG	TAGCTCCCAG	AGCAACCCTG	GAAACACTCT	TCACACATCC	TGACCAAGTT	660							
85 86	CAGGGCAGTG	AAGGCACTGC	CCTCATCGTT	TCCAGAATGT	GGATGGAGCC	AGTCACCCAA	720							
87 88	CCAGCCATTT	GTCGTGAGAG	GCATCTTGTT	CTGCTACCAT	GTGACTAGGC	AGAAAATCTG	780							
89 90	CTTTTGTTTC	ATTTATTGAG	TCAGTCTCTG	GATGAGGGAA	AGCTCATGCT	CATGTGGCTA	840							
91 92	GAGCTTTGCT	TGCACAGTAT	TAGGCAGGGG	CAGAGGGCTG	GGCTACCTTA	AAAATACTTG	900							
93 94	CCCTTTTTCT	TGGGGACTCT	GGGGAAGCGG	TTTTACTACC	TTTGACTTGG	GAGCCTTGCT	960							
95 96	CTTCTGCCAG	CTAACCATGG	GCCTGCCTCT	TGGTTTTCTG	CACCTCAGCT	TTTCCCGGAT	1020							
97 98 99	AGGTGGGGAC	CCATCATCAA	AAGTGACAGA	GAAGATAAGG	CCCAGGGGCT	TTCAAGTCAC	1080							

RAW SEQUENCE LISTING PATENT APPLICATION US/09/030,832

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					,	INPUT SET: S2412:	c
300	ma amaammaa	CMMM A CM A CA	maxmmamaax	ттотто » » »	-		1140
100	TAGTGGTTCC	GTTTAGTAGA	TGATTGTGCA	TTGTTTCAAA	ATGGTGCCCT	AGTGACTACA	1140
101 102	AAGCCCCAGA	GCCAGCATCA	ጥሮ እጥሮ እ እ አርር	እ እጥር እ ር እ ር ጥ እ	GGTAAGCACC	ልርልሮርጥሮሮጥጥ	1200
102	AAGCCCCAGA	GCCAGCAICA	TCATCAAAGC	ARIGACAGIA	GOTANGENEE	ACACCICCII	1200
104	GGGAGTGAGG	AGGATTCTTG	AGGAGAAAG	Δ GGTCTTCTT	тстсстстве	TGGAGACTAG	1260
105	COCKCICKCC	ROOKITOITO	послонивно	AGGIGIIGII	1010010100		
106	ттдатстдда	GACGTGGTTC	CTTCAATGTC	AGAGTTATCT	TTGGGACTGG	TCTCAAACTC	1320
107	•••••						•
108	TTCCAGTTGG	GCCCTGGGGC	AGGTCTCTCC	ATCTGGAGCA	TACTTACGTG	CTCGGCGATT	1380
109							
110	AAGGGTTCAG	AATGCAGTGG	TAGCCTGCTA	CTCTGGCCAT	CTTGGACCTT	GATCCAGAGA	1440
111							
112	ATCTCTGCTT	CAGGAGCTTC	TAAGAGAGTC	CAGCCCTGCC	TCCAGAGAGA	GGCTTGCCCT	1500
113							
114	TCACTGATGG	CTGTGGAGCC	TCTGATGGAA	TATTATTGCT	GGTCAGGAAT	TCACTGTCTT	1560
115							
116	ACAAGGAGGT	TTCCTTCTTC	TCTAGACAGT	TCTGTTCATC	AAAAAACTCT	CCCTGTTCTT	1620
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118	CTGAAATTGG	AGTCTCTGGA	AGTTCCACAC	ATTAAGCTTA	GTTCTTTTTC	CTTGGAACTG	1680
119							
120	TCCAGGTTAC	ATTAGTCCAG	CCACTGTTTC	ACAGGACCGA	GATTAAACGA	TCAACATCAT	1740
121							
122	CATTCCCGGC	ATGGATCATA	GTCTGTTGTA	GTCTACATAG	CCCTAGTTTA	TTTTTCTTCC	1800
123	COURT MORE COMMO	AAAGCTTTGG	CMCC AMMC AM	mammam s ama	CCACTCCTCT	CCACATICCTC	1860
124 125	CTTATTCTTC	AAAGCTTTGG	GICCATICAT	TOTTOTAGIC	CCAGICCICI	GGACATGGTC	1000
126	ጥልጥጥጥል እጥጥ ር	TGTCCCTCTG	ACACTGCAGT	GACCAACCAT	GATCTGGTCA	ААСАССАТАА	1920
127	IAIIIAAIIG	1010001010	ACACIOCAGI	ORCCARCCAI	CATCIOCICA	ANONOUNTAN	1720
128	GAGTTTGAGC	AGAAAACCAT	CTTTAGCATA	TATTTTTTTG	CTTTGGTTCA	TCAGCCCCAG	1980
129							
130	ATATATTGTT	TTCCTTACCC	GTGCTTCTCT	CACTCCTCAA	GAAGAAGAAA	GTGTGTGTTA	2040
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132	GCATCTTTCT	CTTGTCCTTC	AAGACAAATT	GGCATCTCTT	GACGAGCGGA	GAAGGTTCTT	2100
133							
134	TTTTGGCCAG	AATAAATAAA	ATTAAAATAG	AATCATCCAA	CAGAATAATA	AATCTTCGTG	2160
135							
136	CAACAAGAAT	ATATTATATA	AACCCAGCAA	TTTTGCAGGG	CCTGGGTATA	ACTAATTAGA	2220
137							
138	AGTGTCTTAA	ATTGCAGTCA	AGATCCCACG	GCAAGAGGAC	TTTTGATAAA	TACATTCTGG	2280
139	aa.am.aaa.		таатааатаа	1.001.00mama	as a a sammam	1maaa111aa	2240
140	CCAGTAGGCA	AGTGCGAGGG	TGGTCCGTGC	AGCAGCTCTG	GAGGAGTTCT	ATCCCAAAGC	2340
141 142	ТАТАСТСААС	ACACAGGTTT	CCCACTCACA	A C A C C T C C C T	CCCTTCCCCTT	CTTCCAGAAG	2400
143	TATACTCAAC	ACACAGGIII	CCCACTGACA	ACAGGICGCI	ccciidccii	CIICCAGAAG	2400
144	ΔΑΤ ΟΤΩΔΩΔΑ	GCTTTGCTCC	ጥጥር ልርጥጥጥር ል	СТССТСССАА	GGTGAGTACG	AAAGGCTGCT	2460
145	ARICIONOM	0011100100	IIOAOIIIOA	01001000101	00100100		2100
146	CTTCTCATTC	AGCTCCAGCC	CACCCAGACC	TGCTGGGCAG	TTGATCCACT	TTCCAAAATA	2520
147							
148	GGAGGACACA	CGGACAGGTT	AGTGTTCTGG	TCTGCTTTAC	AAAGCTGTTG	CCTGACAGGA	2580
149							
150	GCAAGAGTTG	CTGAGTGTCT	GCTGGGTTCC	AGGCTGTTCT	GAGCTTGGAT	GGGCAGGGGC	2640
151				٠			
152	TAAGCCACAG	GGCCTGCATG	AGCCCTGCCT	TGAAGGGACT	TAAAAGACGA	CCTAATTATA	2700

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153 154	GGCCTAGGAA TTTTACAGTA TTGCAACTGC AATGTGATGC TGAAAGTGGA AAATGATGTC	2760
155 156	CTGGGCTCAG AGAAAAGCCC ACACCAGCCT GGGAGTCATG ATAGCAGCAG AGTGCTTGGG	2820
157 158	GAGGGTGTGT CAGAGCATAA AGCAGCATGA ATGCTACAAA AGAAGATGCC AACTAGAGAT	2880
159 160	ATAGGTTGTC ATCAGGTCCC GGAGGAGCCA TGACCGTCTA GCTGAGAGCC ATGACCAAGG	2940
161 162	ACACAATGTC CAAGTGACTG TGAGGACCTC AGTCTGCCCT GTGGATGTGT ATGCCACAGA	3000
163 164	CCTGACTTCT GGAGGGCTGA CTGAAATGTT CATTTTAAGC TTTTTCTTCT CTTTCCCTGA	3060
165 166	AACACTCAGT TTGGGTTAGG GGTCATAGAC TAAGACCAAA GAGTCCAGGG TTAGAATCTT	3120
167 168	GGTGTAAAAT TGCAGGCCAT CTCAGGAAAT CTGTGAGCAG ATGGGATTGG CTTTGGGTAA	3180
169 170	GGTGCGTGTG GAAAATGTCA GTGGGAGCCG GGTCATGGTG GGCCTTTAGC ATCAGATTCC	3240
171 172	AGAGTGCAGA TAGTCTGTAT AGCTCATGTG AAACAGGGAG CCACCAAAAC TTTGGGGAGC	3300
173 174	AGGCTAGTGC CGGTTTTGAC CACCTGTGGA GCAGTGCTCA CTCACGAAGG CATTTTGCCA	3360
175 176	TCACATGAAT GTGCAGAAAG GAGGCCAAAA GCATTCTGTG CTTCTCCACC ACAGCACAGA	3420
177		
178 179	CTTCCCTAGT CTCATTTGCT GAGAGTAGAC ATTCTGAGGG CCAGCAGTGC AGGTGTGATG	3480
180 181	TGCCTCAGAG GGTATGAAGC CCTTAGTCAG CCATCTGGAT ATCAGCTGCG TGGGCATGAT	3540
182 183	ATCTAGAAGG CTAATTGATT TTTTCACTTT CACCTGACTC TCTTGCCAAC CTGCAGAGAC	3600
184 185	AGACATTGGG TGTAGGACAG TGAACTGAGA AGGAAGCTAT TAAGATTCTG GCCTTGGCTT	3660
186 187	AGCTCTCAAC TGGCCATTGG TCTTGCAGTA AGTCTTTTTT CTGGGCTTCT TCTGGTCCTA	3720
188 189	TTTGTATGTA TTGCATTGTC ACATCATGCC TCTATCCTAG GGAATACTGT GAGCTGAAAA	3780
190 191	ATGAGACCCT TACTGTTCAC GTCCTGCTAA GGGGGACCGT CGTGTCAGCA CTGTAATGCA	3840
192 193	GTGATGTTTT TTGTGTCTTT CAGGTGACTT C ATG GTC ATG ACG ATT TTC TTC Met Val Met Thr Ile Phe Phe	3892
194 195	1 5	
196	AAT GTG AGC AGG CGG TTT GGC TAT GTT GCC TTT CAA AAC TAT GTC CCT Asn Val Ser Arg Arg Phe Gly Tyr Val Ala Phe Gln Asn Tyr Val Pro	3940
197 198	10 15 20	
199 200	TCT TCC GTG ACC ACG ATG CTC TCC TGG GTT TCC TTT TGG ATC AAG ACA	3988
201 202	Ser Ser Val Thr Thr Met Leu Ser Trp Val Ser Phe Trp Ile Lys Thr 25 30 35	
203 204	GAG TCT GCT CCA GCC CGG ACC TCT CTA GGG ATC ACC TCT GTT CTG ACC	4036
205	Glu Ser Ala Pro Ala Arg Thr Ser Leu Gly Ile Thr Ser Val Leu Thr	

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207															ama	maa	1004
208							TTT										4084
209	мес	Thr	Thr	Leu		Thr	Phe	ser	Arg	_	ASN	Pne	Pro	Arg		Ser	
210					60					65					70		
211	mam	N TO C		000	mma		mma	mam	3.000	000	» ma	maa	mma	ama	mma	maa	4122
212							TTC										4132
213	Tyr	тте	Thr		Leu	ASP	Phe	туг		АТА	тте	Cys	Pne		Pne	Cys	
214				75					80					85			
215	mma	maa	COM	ama	mma	a a a	mmm	COM	ama	CITIC	220	mma.	CTIC	A TO CO	ma.c	220	4100
216 217							TTT Phe										4180
217	Pne	Cys	90	rea	red	GIU	Pne	95	vaı	rea	ASII	FIIE	100	TTE	ıyı	ASII	
219			90					93					100				
220	CAC	202	***	000	CAM	COM	TCT	com	* * *	CTTC	aaa	C) A ITT	CCT	CCT	N TO CO	2.24	4228
221							Ser										4220
222	GIII	105	гуз	мта	nis	ALG	110	FIU	цуз	Leu	ALG	115	FIO	ALY	TTE	ASII	
222		105					110					115					
223) CC	COT	ccc	CAT	acc	COT	ACC	COT	CCA	COT	TOO	CGA	acc	Tr.Carr	aaa	ccc	4276
225							Thr										4270
226	120	Ary	ATG	1113	AIG	125	1111	ALG	AIG	ALG	130	Arg	AIG	Cys	AIG	135	
227	120					123					130					133	
228	CAA	CAT	CAG	GAA	сст	արդար	GTG	ጥርር	CAG	יוייי ע	CTC	ACC	۵СТ	GAG	GGA	ልርጥ	4324
229							Val										4524
230	0111	1115	0111	OIG	140	1110	*41	Cy5	0111	145	V U T	1111	****	OIG	150	DCI	
231					110					140					130		
232	САТ	GGA	GAG	GAG	CGC	CCG	TCT	TGC	TCA	GCC	CAG	CAG	ccc	ССТ	AGC	CCA	4372
233							Ser										20,2
234	p	,		155	5			-7-	160					165			
235																	
236	GGT	AGC	CCT	GAG	GGT	CCC	CGC	AGC	CTC	TGC	TCC	AAG	CTG	GCC	TGC	TGT	4420
237							Arg										
238	- 4		170		-		,	175		-		-	180		•	-	
239																	
240	GAG	TGG	TGC	AAG	CGT	TTT	AAG	AAG	TAC	TTC	TGC	ATG	GTC	CCC	GAT	TGT	4468
241	Glu	Trp	Cys	Lys	Arg	Phe	Lys	Lys	Tyr	Phe	Cys	Met	Val	Pro	Asp	Cys	
242		185	_	_	_		190	_	_		_	195			_	_	
243																	
244	GAG	GGC	AGT	ACC	TGG	CAG	CAG	GGC	CGC	CTC	TGC	ATC	CAT	GTC	TAC	CGC	4516
245	Glu	Gly	Ser	Thr	Trp	Gln	Gln	Gly	Arg	Leu	Cys	Ile	His	Val	Tyr	Arg	
246	200					205					210					215	
247																	
248							GTT										4564
249	Leu	Asp	Asn	Tyr		Arg	Val	Val	Phe		Val	Thr	Phe	Phe		Phe	
250					220					225					230		
251																	
252												TAG	STAC	CAG	CTGGT	PACCO	T 4617
253	Asn	Val	Leu	_	Trp	Leu	Val	Cys		Asn	Leu						
254				235					240								
255																	_
256	GTG	3GGC1	AAC (CTCT	CCAG!	rt co	CCCA	GAG	3 TC	CAAGO	ccc	TTG	CAAC	GGG A	AGTTO	GGGG	SA 4677
257																	
258	AAG	CAGC	AGC A	AGCAG	3CAG(JA GO	CGAC	'AGA	3 TT7	TTCC	CTGC	CCCI	ATTCO	ecc 1	AAAC	AGAAG	C 4737

SEQUENCE VERIFICATION REPORT PATENT APPLICATION *US/09/030*,832

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27

Wrong application Serial Number

(A) APPLICATION NUMBER: To be assigned